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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,471

06/23/2003

Jeffry Arnold LeBlanc

STL 3244

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11/06/2006

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EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/602,471		LEBLANC ET AL.	
	Examiner		Art Unit	
	Justin Krause		3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,9 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 21, 2006 has been entered.

Specification

2. The amendment filed September 21, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "a feature" of the step. The element is not disclosed in the original disclosure in any way to enable one of ordinary skill in the art to make or use the device, it is unclear what structure of the step is defined by "the feature".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unknown what "a feature" of the step is. The element is not disclosed within the specification, nor shown in the drawings. Its structure and location are not understood.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 1-5 and 9, as best understood is rejected under 35 U.S.C. 102(b) as being anticipated by Sakatani et al. (US Patent 5,046,863).

Sakatani discloses a fluid dynamic bearing system comprising:

- A stationary sleeve (12)
- A rotating shaft (13) axially disposed through the sleeve
- A journal gap between the shaft and the sleeve, defined by first and second interfacial surfaces of the shaft and sleeve (see Fig 1)
- At least one set of fluid dynamic grooves (15) formed on the first interfacial surface of the journal gap

- At least one step (12) defined on the second interfacial surface on the journal gap, wherein the at least one step comprises a feature that reduces the journal gap in a localized region and at least partially aligned with a portion of, the at least one set of fluid dynamic grooves.

Regarding claim 2, the step opposes a portion of the at least one set of grooves across the journal gap.

Regarding claim 3, the fluid dynamic grooves are asymmetric (15A,15B)

Regarding claim 4, the at least one step comprises a circumferential raised surface on the second interfacial surface.

Regarding claim 5, the at least one step is opposite and offset axially from the at least one set of fluid dynamic grooves.

Regarding claim 9, the first interfacial surface of the gap comprises the inner diameter of the sleeve and the second surface comprises the outer diameter of the shaft.

6. Claims 12-14, as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Moritan et al (US Patent 5,715,116).

Moritan discloses a fluid dynamic bearing motor comprising:

- A stationary sleeve (21)
- A shaft and hub rotatable in relation to the sleeve (12 and 11)
- A journal defined between the sleeve and the shaft (see Fig 1c, the area defined between 12 and 21)

- A fluid bearing means between the sleeve and the shaft (Col. 7, lines 43-46)
- A pressure regulating means (profile in sleeve 21, see fig. 1b) cooperating with and opposing the bearing means across the journal therefrom to maintain proper axial alignment of the shaft and hub with the sleeve.

Regarding claim 13, the fluid bearing means comprises at least one set of fluid dynamic grooves (12a) formed on a first surface defining the journal and fluid in the journal (Col 7, lines 43-46).

Regarding claim 14, the regulating means comprises at least one step (profile in sleeve 21) formed in the second surface defining the journal and is disposed at least in part across the journal from at least one set of fluid dynamic grooves.

Response to Amendment

7. Applicant's amendment to claim 1 introduces new matter into the claim as stated in detail above. Additionally, the amended language is regarded as functional since it describes how the device works, and not how it is structured. As best understood, the examiner finds that the device of Sakatani is capable of performing the claimed function.

8. Regarding claim 12, the amended language is functional in nature providing no additional positively recited structure. The device of Moritan is capable of performing the claimed function as the shaft and stationary sleeve will move relative to each other during operation, causing the pressure regulating means to move axially relative to the bearing means and towards the apex.

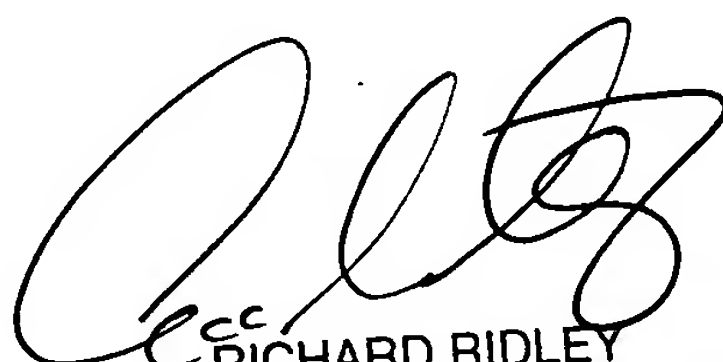
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK
10/23/06


RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER